PATENT COOPERATION TREATY

From the INTERNATIONAL SEARCHING AUTHORITY	PCT
To: MITSCHERLICH & PARTNER Attn. Körber, Martin Sonnenstrasse 33 Postfach 33 06 09 D-80066 München GERMANY ARTINE R E C E V E D E N D D D D D D D D D D D D D D D D	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION
Mitscherlich & Parther Patent- u. Rechtserwähle	(PCT Rule 44.1)
	(day/month/year) 29/06/2004
Applicant's or agent's file reference	
P27468WO Mkö	FOR FURTHER ACTION See paragraphs 1 and 4 below
International application No. PCT/EP2004/001766	International filing date (day/month/year) 23/02/2004
Applicant SONY ERICSSON MOBILE COMMUNICATIONS AB	as: Total lich
Authority have been established and are transmitted herewi Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claim When? The time limit for filing such amendments is nore International Search Report; however, for more Where? Directly to the International Bureau of WIPO, 34 1211 Geneva 20, Switzerland, Fa For more detailed instructions, see the notes on the acco The applicant is hereby notified that no international search Article 17(2)(a) to that effect and the written opinion of the ir With regard to the protest against payment of (an) addition the protest together with the decision thereon has been	ins of the International Application (see Rule 46): Imally 2 months from the date of transmittal of the details, see the notes on the accompanying sheet. It chemin des Colombettes ascimile No.: (41–22) 740.14.35 Impanying sheet. In report will be established and that the declaration under international Searching Authority are transmitted herewith. In transmitted to the International Bureau together with the test and the decision thereon to the designated Offices.
Shortly after the expiration of 18 months from the priority date, the International Bureau. If the applicant wishes to avoid or postpone application, or of the priority claim, must reach the International Buefore the completion of the technical preparations for internation. The applicant may submit comments on an informal basis on the International Bureau. The International Bureau will send a copy of	publication, a notice of withdrawal of the international ureau as provided in Rules 90 bis.1 and 90 bis.3, respectively, nal publication. written opinion of the International Searching Authority to the
international preliminary examination report has been or is to be a the public but not before the expiration of 30 months from the prior Within 19 months from the priority date, but only in respect of sor examination must be filed if the applicant wishes to postpone the date (in some Offices even later); otherwise, the applicant must, wacts for entry into the national phase before those designated Offices, the time limit of 30 months months.	established. These comments would also be made available to brity date. me designated Offices, a demand for international preliminary entry into the national phase until 30 months from the priority within 20 months from the priority date, perform the prescribed ices.
See the Annex to Form PCT/IB/301 and, for details about the app Guide, Volume II, National Chapters and the WIPO Internet site.	
Name and mailing address of the International Searching Authority	Authorized officer

Franco Spanu

Form PCT/ISA/220 (January 2004)

European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, _ Fax: (+31-70) 340-3016

(See notes on accompanying sheet)

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the PCT Applicant's Guide, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only.

What parts of the International application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been its filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Administrative Instructions, Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

Notes to Form PCT/ISA/220 (first sheet) (January 1994)

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- [Where originally there were 48 claims and after amendment of some claims there are 51]:
 "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- (Where originally there were 15 claims and after amendment of all claims there are 11):
 "Claims 1 to 15 replaced by amended claims 1 to 11."
- [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
 "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
 "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1-10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international appplication is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

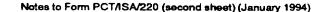
Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the same time of filing the amendments with the International Bureau, also file a copy of such amendments with the International Preliminary Examining Authority (see Rule 62.2(a), first sentence).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, where upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see Volume II of the PCT Applicant's Guide.



ISA210-1 PATENT COUP

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INTERNATIONAL SEARCH REPORT

Applicant's or agent's file reference	FOR FURTHER		see Form PCT/ISA/220
P27468WO Mkö	ACTION	as wel	I as, where applicable, item 5 below.
International application No.	International filing date (day/mon	th/year)	(Earliest) Priority Date (day/month/year)
PCT/EP2004/001766	23/02/2004	1	09/04/2003
Applicant			
SONY ERICSSON MOBILE COM	MUNICATIONS AB		
This International Search Report has be according to Article 18. A copy is being to	en prepared by this International Sea ransmitted to the International Bureau	rching Autho	ority and is transmitted to the applicant
This International Search Report consist	s of a total of <u>3</u> sh	ets.	
X It is also accompanied b	y a copy of each prior art document c	ited in this r	eport.
Basis of the report			
 a. With regard to the language, the language in which it was filed, ur 	e international search was carried out nless otherwise indicated under this it	on the basis em.	s of the international application in the
this Authority (R	ule 23.1(b)).		tion of the international application furnished to
b. With regard to any nucle	otide and/or amino acid sequence	disclosed in	n the international application, see Box No. I.
2. Certain claims were for	und unsearchable (See Box II).		
3. Unity of invention is lac	c king (see Box III).		
4. With regard to the title,			
	ubmitted by the applicant.		
the text has been establi	shed by this Authority to read as follo	ws:	
5. With regard to the abstract,			
<u> </u>	ubmitted by the applicant.	:_ A.u:	and the control of th
may, within one month from	om the date of mailing of this internati	onal search	as it appears in Box No. IV. The applicant report, submit comments to this Authority.
6. With regards to the drawings ,			
a. the figure of the drawings to be p	published with the abstract is Figure N	lo. <u>6</u>	
X as suggested by	the applicant.		
=	is Authority, because the applicant fa	•••	_
	is Authority, because this figure bette	r characteri	zes the invention.
b none of the figures is to b	e published with the abstract.		

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ON TREATY

From the INTERNATIONAL SEARCHING AUTHORITY

To: MITSCHERLICH & PARTNER

PCT

NOTIFICATION OF TRANSMITTAL OF

Attn. Körber, Martin Sonnenstrasse 33 Postfach 33 06 09 D-80066 München GERMANY	THE INTERNATIONAL SEARCH REPORT AND THE WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY, OR THE DECLARATION		
	(PCT Rule 44.1)		
	Date of mailing (day/month/year) 29 / 06 / 2004		
Applicant's or agent's file reference			
P27468WO Mkö	FOR FURTHER ACTION See paragraphs 1 and 4 below		
International application No.	International filing date		
PCT/EP2004/001766	(day/month/year) 23/02/2004		
Applicant			
SONY ERICSSON MOBILE COMMUNICATIONS AB			
The applicant is hereby notified that the international search Authority have been established and are transmitted herewith the international search.	report and the written opinion of the International Searching th.		
Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claim	s of the International Application (see Rule 46):		

1. x	The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.
	Filing of amendments and statement under Article 19: The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):
	When? The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.
	Where? Directly to the International Bureau of WIPO, 34 chemin des Colombettes 1211 Geneva 20, Switzerland, Fascimile No.: (41-22) 740.14.35
	For more detailed instructions, see the notes on the accompanying sheet.
2.	The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.
3.	With regard to the protest against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:
	the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices. no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.
4 Dam	indone.

Shortly after the expiration of 18 months from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within 19 months from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until 30 months from the priority date (in some Offices even later); otherwise, the applicant must, within 20 months from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of 30 months (or later) will apply even if no demand is filed within 19

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the PCT Applicant's Guide, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority	Authorized officer	
European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Franco Spanu	

PCT/EP2004/001766

A. CLASSI IPC 7	HO3G1/00 HO3G3/30			
According to	o International Patent Classification (IPC) or to both national classifica	ation and IPC		
B. FIELDS	SEARCHED			
Minimum do IPC 7	ocumentation searched (classification system followed by classification H03G H04B H03F	on symbols)		
	tion searched other than minimum documentation to the extent that s			
	ata base consulted during the international search (name of data bas	e and, where practical, se	arch terms used)	
C. DOCUME	ENTS CONSIDERED TO BE RELEVANT			
Category °	Citation of document, with indication, where appropriate, of the rele	evant passages	Relevant to claim No.	
Α	US 5 909 643 A (AIHARA YUUKICHI) 1 June 1999 (1999-06-01) column 3, lines 30-57 figure 1		1-15	
A	WO 01/67621 A (QUALCOMM INC) 13 September 2001 (2001-09-13) the whole document		1-15	
A	US 5 296 821 A (PETERSEN MICHAEL 22 March 1994 (1994-03-22) column 2, line 32 - column 3, lir figure 4	•	1-15	
A	EP 1 229 642 A (SONY INT EUROP GN 7 August 2002 (2002-08-07) cited in the application paragraphs [0001] - [0045] figure 1	1BH)	1-15	
Furth	er documents are listed in the continuation of box C.	X Patent family me	mbers are listed in annex.	
**Special categories of cited documents: *A* document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention or cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention or cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *A* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *A* document member of the same patent family Date of the actual completion of the international search report				
3	June 2004	29/06/2004		
Name and m	ailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Authorized officer Goethals	, F	

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International Application No EP2004001766 PCT/EP2004/001766

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 5909643	Α	01-06-1999	JP CN	9148852 A 1154610 A ,B	06-06-1997 16-07-1997
WO 0167621	A	13-09-2001	US AU CA CN EP JP WO	6721368 B1 4338401 A 2401891 A1 1461522 T 1264411 A2 2004500775 T 0167621 A2	13-04-2004 17-09-2001 13-09-2001 10-12-2003 11-12-2002 08-01-2004 13-09-2001
US 5296821	Α	22-03-1994	NONE		
EP 1229642	Α	07-08-2002	EP	1229642 A1	07-08-2002